



Features



Multiple bootstrap IMSIs to enable autonomous network switching



Advanced, intelligent eUICC eSIM with full multi-IMSI capability



Integration with Eseye Connectivity Management Platform to seamlessly manage network switching



Private APN, VPN and Fixed IPs to provide complete security



Simple SIM estate Management via Central SIAM Console



Full suite of security features, including IMEI locking and bespoke firewall



Real-time billing alerts and cost management



Provides real-time SIM location-based services

Benefits



Ubiquitous Global Connectivity:

achieve over 99.8% device connectivity uptime across more than 190 countries globally



Out of the Box, Zero Touch

Provisioning: automatic Over-The-Air (OTA) connection and setup of the device with no on-site configuration



Central Management:

one global point of contact for service, support and billing for all IoT device connectivity; no need for multiple MNO contracts and associated support agreements



Improved Connectivity Resilience:

Fully eUICC compliant eSIM with multi-IMSI capability to allow complete autonomy to switch networks whilst preserving multiple fallback bootstraps in the event of an OTA switch under eUICC



Future Proofed SIM Technology:

5G and NB-IoT ready with support for LTE networks, which will benefit applications using all 4G networks including Cat-M1 Devices.



Flexible integration:

multiple out-of-box integration options with Cloud providers and device manufacturers



SIM Specification

SIM Type

- Standard M2M grade 2FF, 3FF card or MFF2 embedded (eSIM)
- M2M grade MFF2 embedded cards and specifications are available on request

MFF2 Operation

MFF2 EMBEDDED SIM

Operating Temperature Range -40° to +85°C

Temperature Humidity Bias (THB) To JESD22-A101

Storage Temperature -40° to +125°C

Vibration Variable Frequency (VVF) To JESD22-B103

MFF2 Power

- Supply voltage range; 1.62 V to 3.3 V

MFF2 Package Dimensions

- Weight; 0.17g

Provisioning & Management

- Eseye SIAM portal (account required). [See more here](#)
- API available. [See more here](#)

Features

- SMS/MMS/USSD/CSD
- SIMID barcode

Security

- Private APN
- APN Firewall
- Side channel attack detection: (SPA, DPA)
- Encrypted storage: code, keys and data
- Blocking available on IMEI, location, country and services
- Flexible feature enablement/ disablement

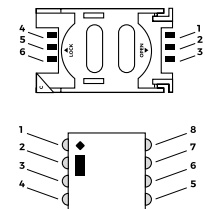
Memory & Data Storage

- Non Volatile Memory (NVM): 512 kB
- write/erase time (max.): 2.3 ms
- Data retention time (min.): over 10 years at -40 to +85°C
- High stress memory (HSM) supports >2M E/W cycles per file

SIM PIN Definitions

For full details on the layout of Embedded SIMs [see here](#)

PIN	SIM CARD (2FF/3FF)	EMBEDDED SIM (MFF2)
1	VCC	GND
2	RST	NC
3	CLK	I/O
4	GND	NC
5	VPP	NC
6	I/O	CLK
7	-	RST
8	-	VDD



Conforming to the JEDEC specification, ideal for automated soldering as part of manufacturing package thickness shall not exceed 1.0mm. An index marker will be visible on the exposed metal heat feature located at the terminal 1 corner. The topside terminal 1 shall be indicated by a marked feature. The exposed metal heat feature (exposed die pad) of the package is either electrically connected internally to ground or it is not electrically connected within the package. The electrical handling of the JEDEC terminals shall be as defined in ETSI TS 102 221

Ordering Information

Available to order via email to sales@eseye.com.

Minimum order quantity: 1 SIM for 2FF / 3FF and 200 SIMs MFF2.

Lead time: we aim to process all 2FF / 3FF SIM card orders on the day of order (if ordered before 3PM GMT).

Please note, these specifications may be subject to change without prior notice.

Name	Order Code
AnyNet 2FF/3FF/4FF	ES663x
AnyNet MFF2	ES662x